

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
(Modified) PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98 (b))



ATTY. DOCKET NO.

6351.US.P2

APPLICANT

O.S. Khalil, et al.

FILING DATE

10/15/99

SERIAL NO.

09/419,461

GROUP

3736

## U.S.PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
<i>WJK</i>	A1	3,628,525	12/21/71	Polanyi, et al.			
<i>WJK</i>	A2	3,638,640	02/01/72	Shaw			
<i>WJK</i>	A3	4,223,680	09/23/80	Jobsis			
<i>WJK</i>	A4	4,259,963	04/07/81	Huch			
<i>WJK</i>	A5	4,432,365	02/21/84	Leist			
<i>WJK</i>	A6	4,655,225	04/07/87	Dähne, et al.			
<i>WJK</i>	A7	4,882,492	11/21/89	Schlager			
<i>WJK</i>	A8	4,890,619	01/02/90	Hatschek			
<i>WJK</i>	A9	4,926,867	05/22/90	Kanda, et al.			
<i>WJK</i>	A10	4,975,581	12/04/90	Robinson, et al.			
<i>WJK</i>	A11	5,007,423	04/16/91	Branstetter, et al.			
<i>WJK</i>	A12	5,057,695	10/15/91	Hirao, et al.			
<i>WJK</i>	A13	5,086,229	02/04/92	Rosenthal, et al.			
<i>WJK</i>	A14	5,115,133	05/19/92	Knudson			
<i>WJK</i>	A15	5,122,974	06/16/92	Chance			
<i>WJK</i>	A16	5,131,391	07/21/92	Sakai, et al.			
<i>WJK</i>	A17	5,148,082	09/15/92	Itou, et al.			
<i>WJK</i>	A18	5,187,672	02/16/93	Chance, et al.			
<i>WJK</i>	A19	5,209,231	05/11/93	Cote, et al.			
<i>WJK</i>	A20	5,218,207	06/08/93	Rosenthal			
<i>WJK</i>	A21	5,237,178	08/17/93	Rosenthal, et al.			
<i>WJK</i>	A22	5,277,181	01/11/94	Mendelson, et al.			
<i>WJK</i>	A23	5,297,548	03/29/94	Pologe			
<i>WJK</i>	A24	5,313,941	05/24/94	Braig, et al.			
<i>WJK</i>	A25	5,321,265	06/14/94	Block			
<i>WJK</i>	A26	5,324,979	06/28/94	Rosenthal			
<i>WJK</i>	A27	5,337,745	08/16/94	Benaron			
<i>WJK</i>	A28	5,348,002	09/20/94	Caro			
<i>WJK</i>	A29	5,348,003	09/20/94	Caro			
<i>WJK</i>	A30	5,361,758	11/08/94	Hall, et al.			
<i>WJK</i>	A31	5,362,966	11/08/94	Rosenthal, et al.			
<i>WJK</i>	A32	5,372,136	12/13/94	Steuer, et al.			
<i>WJK</i>	A33	5,379,764	01/10/95	Barnes, et al.			
<i>WJK</i>	A34	5,383,452	01/24/95	Buchert			
<i>WJK</i>	A35	5,402,778	04/04/95	Chance			
<i>WJK</i>	A36	5,452,716	09/26/95	Cliff			
<i>WJK</i>	A37	5,481,113	01/02/96	Dou, et al.			
<i>WJK</i>	A38	5,492,118	02/20/96	Grafton, et al.			
<i>WJK</i>	A39	5,492,769	02/20/96	Pryor, et al.			
<i>WJK</i>	A40	5,497,769	03/12/96	Grafton, et al.			
<i>WJK</i>	A41	5,499,627	03/19/96	Steuer, et al.			
<i>WJK</i>	A42	5,515,847	05/14/96	Braig, et al.			
<i>WJK</i>	A43	5,533,509	07/09/96	Koashi, et al.			

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*Matthew Krumer*

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(Form PTO-1449)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 6351.US.P2 APPLICANT S. Khalil, et al.	SERIAL NO. 09/419,461
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		FILING DATE 10/15/99	GROUP 3736

(37 CFR 1.98 (b))

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A44	5,551,422	09/03/96	Simonsen, et al.		
A45	5,553,615	09/10/96	Carim, et al.		
A46	5,553,616	09/10/96	Ham, et al.		
A47	5,596,987	01/28/97	Chance		
A48	5,665,530	09/09/97	Oyamada, et al.		
A49	5,672,875	09/30/97	Block, et al.		
A50	5,676,143	10/14/97	Simonsen, et al.		
A51	5,720,284	02/24/98	Aoyagi, et al.		
A52	5,770,454	06/23/98	Essenpris, et al.		
A53	5,823,951	10/20/98	Messerschmidt		

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC- ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION YES NO
B1	0 472 216	02/26/92	EP				
B2	0 810 429	12/03/97	EP				
B3	42 42 083	06/16/94	DE				
B4	44 17 639	23.11.95	DE				X**
B5	196 34 152	05.03.98	DE				X*
B6	92/10131	06/25/92	PCT				
B7	92/20273	11/26/92	PCT				
B8	93/07801	04/29/93	PCT				
B9	93/13706	07/22/93	PCT				
B10	94/02837	02/03/94	PCT				
B11	94/05984	03/17/94	PCT				
B12	94/13199	06/23/94	PCT				
B13	95/20757	03.08.95	PCT				
B14	98/03847	29.01.98	PCT				

\* See Abstract of WO98/08076 (PCT Counterpart of DE 196 34 152)

\*\* See U.S. Patent No. 5,770,454 (U.S. Counterpart of DE 44 17 639)

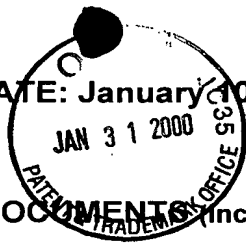
## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1	Applied Optics, Vol. 31, No. 10, April 1, 1992
C2	Bruulsema, et al., "Correlation between blood glucose concentration in diabetics and noninvasively measured tissue optical scattering coefficient", Optics Letters, Vol. 22, No. 3, 1997, pp. 190-192
C3	Heinemann, et al., "Non-invasive continuous glucose monitoring in Type I diabetic patients with optical glucose sensors", Diabetologia, Vol. 41, 1998, pp. 848-854.
C4	Kienle, et al. "Spatially resolved absolute diffuse reflectance measurements for noninvasive determination of the optical scattering and absorption coefficients of biological tissue", Applied Optics, Vol. 35, No. 13, 1996, pp 2304-214.

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myk	C5	Marbach, et al., "Noninvasive Blood Glucose Assay by Near-Infrared Diffuse Reflectance Spectroscopy of the Human Inner Lip", Applied Spectroscopy, Vol. 47, No. 7, 1993, pp. 875-881.
myk	C6	Qu, et al., "Monte Carlo Modeling Studies of the Effect of Physiological Factors and other Analytes on the Determination of Glucose Concentration In vivo by Near Infrared Optical Absorption and Scattering Measurements", Journal of Biomedical Optics, Vol. 2, No. 3, (1997), pp. 319-325.
myk	C7	Quan, et al., "Glucose determination by a pulsed photoacoustic technique: an experimental study using a gelatin-based tissue phantom", Phys. Med. Biol., Vol. 38 (1993) pp. 1911-1922.
myk	C8	Robbins, et al., "The Endocrine Pancreas", Pathologic Basis of Disease, 3 <sup>rd</sup> Edition, W. B. Saunders Company (1984), pp. 972-990
myk	C9	Tooke, et al., "Skin Microvascular Blood Flow Control in Long Duration Diabetics with and without Complications", Diabetes Research, No. 5, 1987, pp. 189-192.
myk	C10	Wilson, et al., "Progress toward the Development of an Implantable Sensor for Glucose", Clinical Chemistry, Vol. 38, No. 9, 1992, pp. 1613-1617

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(37 CFR 1.98 (b))		FILING DATE 10/15/99	GROUP 3736

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mk	B1	99/59464	11/25/99	PCT		

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

mk	C1	R. Graaff, et al., "Reduced light-scattering properties for mixtures of spherical particles: a simple approximation derived from Mie calculations", <i>Applied Optics</i> , Vol. 31, No. 10, April 1, 1992, pp. 1370-1376.
mk	C2	Jobsis, "Noninvasive, Infrared Monitoring of Cerebral and Myocardial Oxygen Sufficiency and Circulatory Parameters", <i>Science</i> , Vol. 198, 1977, pp. 1264-1267.
mk	C3	Gopinath, et al., "Near-infrared spectroscopic localization of intracranial hematomas", <i>Journal of Neurosurgery</i> , Vol. 79, 1993, pp. 43-47.
mk	C4	Zhang, et al., "Investigation of Noninvasive <i>in Vivo</i> Blood Hematocrit Measurement Using NIR Reflectance Spectroscopy and Partial Least-Squares Regression", <i>Applied Spectroscopy</i> , Vol. 54, No. 2, 2000, pp. 294-299.
mk	C5	Lin, et al., "Dynamics of tissue optics during laser heating of turbid media", <i>Applied Optics</i> , Vol. 35, No. 19, 1996, pp. 3413-3420.
mk	C6	Laufer, et al., "Effect of temperature on the optical properties of <i>ex vivo</i> human dermis and subdermis", <i>Phys. Med. Biol.</i> , Vol. 43, 1998, pp. 2479-2489.
mk	C7	Bruulsema, et al., "Optical Properties of Phantoms and Tissue Measured <i>in vivo</i> from 0.9-1.3 $\mu$ m using Spatially Resolved Diffuse Reflectance", <i>SPIE Proceedings</i> , Vol. 2979, 1997, pp. 325-334.
mk	C8	T. Shiga, et al., "Study of an Algorithm Based on Model Experiments and Diffusion Theory for a Portable Tissue Oximeter", <i>Journal of Biomedical Optics</i> , Vol. 2, No. 2, April 1997, pp. 154-161.

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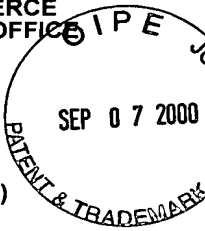
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## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

nyk	C9	Jacques, et al., "Monte Carlo Modeling of Light Transport in Tissues", <i>Optical-Thermal Response of Laser-Irradiated Tissue</i> , edited by A.J. Welch and M.J.C. van Gemert, Plenum Press, New York, 1995, pp. 73-100.
nyk	C10	Wilson, "Measurement of Tissue Optical Properties: Methods and Theories", <i>Optical-Thermal Response of Laser-Irradiated Tissue</i> , edited by A.J. Welch and M.J.C. van Gemert, Plenum Press, New York, 1995, pp. 233-274.
nyk	C11	Morris, et al., "Basic Examination of Blood", <i>Clinical Diagnosis and Management by Laboratory</i> , 1996, pp. 549-559.
nyk	C12	Lin, et al., "Dynamics of tissue reflectance and transmittance during laser irradiation", <i>SPIE Proceedings</i> , Vol. 2134A Laser-Tissue Interaction V, 1994, pp. 296-303.
	C13	<del>U.S. Application Serial No. 09/080,470, filed May 18, 1998.</del>
	C14	<del>U.S. Application Serial No. 09/302,207, filed April 29, 1999.</del>
	C15	<del>U.S. Application Serial No. 09/366,084, filed August 3, 1999.</del>
	C16	<del>U.S. Application Serial No. 09/566,445, filed May 8, 2000.</del>

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